# SOLICITATION

# FOR:

# RENEWABLE ENERGY TECHNOLOGY PROJECTS

# IN NEW JERSEY

# FOR

# ELECTRICITY

# TO SUPPLY THE

# PJM POWER POOL

Docket No. EX01100646

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# SOLICITATION FOR RENEWABLE ENERGY TECHNOLOGY PROJECTS IN NEW JERSEY FOR ELECTRICITY TO SUPPLY THE PJM POWER POOL

December 19, 2001

## 1.0 PROGRAM INFORMATION

### 1.1 PROGRAM SUMMARY:

The Board of Public Utilities ("Board") announces a competitive incentive program to encourage development of grid supply renewable electricity generation ("REG") projects in New Jersey. This Solicitation is the first in what the Board envisions to be an ongoing process of growth and development of a more comprehensive program, able to address the needs of various renewable technologies and barriers against their development. By order dated March 9, 2001, the Board determined that $10,000,000 would be allocated to this program its first year.

This program's objectives are to gain and document experience installing and operating REG projects in New Jersey that will operate over a long period of time, overcome barriers to private investment in renewable energy, and identify the best opportunities for long-term development of REG projects based on New Jersey's resources. Proposals that provide the maximum installed capacity and energy for the funding are preferred, but other criteria will also be considered to encourage a diversity of technologies and maximize the environmental benefits. The funds to be awarded to successful proposals will include production credits for completed projects on a ¢/Kwh basis for a period of five years and may include limited grants for design, permitting and construction.

The Board plans to select as many qualifying proposals as possible within the 2001 funding confines for this Solicitation. Total potential funding for renewable electricity generation projects available in 2001 for this Solicitation is $10 million. Funds not utilized in this Solicitation will be made available for Solicitation(s) in 2002.

**PRE-BID CONFERENCE:**
The Board will hold an optional pre-bid conference on January 8, 2002 at 10:00am at the Board's office in Newark, New Jersey. The purpose of the pre-bid conference is for the Board to answer questions posed by potential bidders. RSVP by January 3, 2002 by faxing your name, company, address, phone and fax number to 973-648-2467. Directions to the Board's office are available at www.bpu.state.nj.us. While conference attendance is optional, potential bidders are urged to attend and/or submit questions.

**PROPOSAL SUBMISSION:**
Proposals are due by noon February 5, 2002, and must be clearly labeled and mailed to:

George Riepe, Assistant Director
NJ Board of Public Utilities
Division of Energy
2 Gateway Center
Newark, New Jersey 07102

**QUESTIONS?**
**TECHNICAL** questions may be directed to **Mona Mosser** (973-648-2891 or mona.mosser@bpu.state.nj.us).

**CONTRACTUAL** questions may be directed to **Regina Nugent** (973-648-3510 or nugenreg@smtp.lps.state.nj.us).

## 1.2 PURPOSE AND INTENT

To provide a competitive incentive program by receiving bids for grid supply renewable energy projects located in New Jersey. Grid supply projects are those that supply electricity to the PJM Power Pool, as opposed to those designed to meet individual customer needs. This program will provide production credits to encourage development of renewable energy projects to provide power to the grid and promote competition among technologies, encourage cost effective renewable grid supply technologies and encourage the development of a thriving, diversified renewable energy market. Limited additional incentives, in the form of grants, will also be considered to facilitate construction of winning projects.

Currently some renewable energy technologies are less able to compete on the basis of cost than others because they may yet be emerging technologies. For the successful implementation of the full intent of the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et seq., ("the Act"), the Board will provide an arena in which grid supply technologies which may not be able to compete as yet on a cost basis, are not denied the opportunity to prove themselves as viable alternatives to traditional electricity supply. Therefore environmental impacts and the need to foster diverse technologies as well as cost will be considered when reviewing project proposals. Data will be collected on the environmental attributes of various renewable technologies. Each project offered in response to this Solicitation has associated environmental impacts, which may include air emissions, land use, water consumption, wastewater disposal, and solid waste generation. Proposals will be reviewed with due consideration of the project's relative environmental impact in these areas, as well as its economic cost, viability and production capacity.

Successful REG projects that are accepted by the surrounding community are very important to the future of renewable energy in New Jersey. For this reason, the Board is seeking proposals that include plans to address real or perceived community concerns by minimizing negative environmental impacts and including appropriate involvement of the local community. Reliable long-term operation is also very important. Eligible technologies for REG projects are photovoltaics, wind energy, fuel cells, and methane gas from landfills (as defined in this Solicitation), or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner. Technologies selected should be suitable for use in New Jersey's environment. Maintenance plans should be strong and proposals should include payment plans that provide adequate incentives to ensure reliable operation. The Board expects the plant(s) to operate for a long time after the Board's participation.

## 1.3 BACKGROUND

N.J.S.A. 48:3-60(a)(3) required that the Board undertake a Comprehensive Resource Analysis ("CRA") of existing energy efficiency policies and programs. The CRA was to include but not be limited to "an assessment of existing market barriers to the implementation of energy efficiency and renewable technologies that are not or cannot be delivered to customers through a competitive marketplace." N.J.S.A 48:3-51. This analysis has led to careful consideration of a myriad of programs and technologies, ranging from the familiar energy efficiency appliance programs to new programs utilizing Class I renewable energy defined as, "electric energy produced from solar technologies, photovoltaic technologies, wind energy, fuel cells, geothermal technologies, wave or tidal action, and methane gas from landfills or a biomass facility provided that the biomass is cultivated and harvested in a sustainable manner." N.J.S.A. 48:3-51. With

the CRA Order issued on March 9, 2001, the Board took another step to address the challenges of the Act. With the Act's elimination of the traditional retail monopolies held by electric public utilities for electric power generation and supply services, New Jersey energy consumers are being afforded the chance to access the competitive market for these services, and to select the energy supplier of their choice. At the same time the Act provided that the long term energy needs of New Jersey consumers will be met in an environmentally sound manner by requiring the Board to re-evaluate existing energy efficiency policies and programs, to consider new energy supply alternatives, and to foster creation of new energy resources to facilitate competitive and diverse electricity supply for New Jersey, including renewable energy sources.

The Board's March 9, 2001 CRA Order determined the funding level for the first three years of the minimum of the Act's required eight years of funding for CRA programs, the programs to be funded, the funding allocation and the initial program administration. The CRA total funding for 2001 is $115 million, $119.326 million for 2002, and $124.126 million for 2003. In addition, the Board determined that $15 million would be added to funding for the fourth year, as will be determined to be appropriate by the Board after the lifting of the utilities' rate caps in August 2003. The Board allocated the funding at a proportion of 75/25 between energy efficiency and renewable energy programs, respectively. The renewable energy programs include both the Customer Sited and Grid Supply Programs. The Board administers the Grid Supply Program, which is the basis for this Solicitation. It has the following funding allocation:

In accordance with the Act, the Board also adopted Renewable Portfolio Standards ("RPS"), which require electric suppliers to include a certain percentage of Class I and Class II renewable energy supply. The RPS are available at www.bpu.state.nj.us under the Division of Energy web page. While not a part of the Act's description of CRA, RPS was raised within the CRA proceeding as an issue that should be addressed. The Board found that fulfilling the requirement for RPS may be difficult initially for suppliers because of the current shortage of developed renewable energy supply, and that in the interest of providing cleaner air for New Jersey citizens, the prudent response is to allow CRA funding to contribute to fulfilling the RPS standards. The Board will reconsider this decision after one year and determine if it remains appropriate. Although not directly part of this Solicitation, respondents should consider this potential market for electricity from REG projects.

Proposals for renewable energy projects offered in response to this Solicitation will result in emissions reductions versus generation of electricity from conventional fossil fuels. The Board and New Jersey Department of Environmental Protection ("NJDEP") will track these reductions to facilitate possible future accounting and trading of emissions reduction credits under New Jersey's Open Market Emissions Trading ("OMET") Rule. The OMET rule allows the trading of credits for volatile organic compounds ("VOCs"), oxides of nitrogen and any greenhouse gas including carbon dioxide as a market-based approach to air quality regulation. It is anticipated that tradable credits may be generated under this program.

## 1.4 KEY EVENTS

The Solicitation will be issued on December 20, 2001.
Letters of intent regarding pre-bid conference and proposal submission on January 3, 2002.
Pre-Bid Conference January 8, 2002.
Responses are due no later than noon on February 5, 2002.

Board approval of awards is scheduled for April 3, 2002.
Award will be issued to grantees April 5, 2002.

## 2.0 DEFINITIONS AND SCOPE OF WORK

### 2.1 DEFINITIONS

"Bid Evaluation Environmental Impact Adjustment ("BEEIA")" – means the associated environmental costs in terms of resource consumption including both land and water usage, air emissions, wastewater discharges, and solid waste generated by the project offered by a bidder. The environmental factors of the product's associated air emissions, water consumption, land use, wastewater discharge and solid waste generation are to be expressed on a per megawatt-hour basis using the procedure outlined in Section 5.3.

"Biomass" means, for the limited purpose of this Solicitation, as it is defined in Executive Order 13134, published in the Federal Register on August 16, 1999, "…any organic matter that is available on a renewable or recurring basis (excluding old-growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, wood and wood residues, animal wastes, and other waste materials. Old-growth timber means timber of a forest from the late successional stage of forest development. The forest contains live and dead trees of various sizes, species composition, and age class structure. The age and structure of old growth varies significantly by forest type and from one biogeoclimatic zone to another."

"Class I Renewable Energy" for the limited purpose of this Solicitation means electric energy produced from commercially available technologies including photovoltaics, wind energy, fuel cells, and methane gas from landfills or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner.

"Electric Discount and Energy Competition Act" means the New Jersey State legislation found at N.J.S.A. 48:3-49 et seq.

"Methane from landfills" means, for the limited purpose of this Solicitation, methane gas generated in the decomposition of municipal solid waste ("MSW") in a state of the art landfill that is constructed, operated and maintained in accordance with the NJDEP sanitary landfill requirements at NJAC 7:26-2A. The proposed project to produce electric energy from methane gas shall not include those components required to be installed to collect either non-methane organic compounds ("NMOC") as set forth in the USEPA requirements at 40CFR60.750 Standards of Performance for Municipal Solid Waste Landfills, or landfill gases as set forth in the NJDEP requirements at NJAC 7:26-2A(f) requirements for sanitary landfill gas collection and venting systems. The proposed project shall include only the landfill gas cleanup components, the combustion units and the electric energy generating units provided the system meets the definition as State of the Art ("SOTA") for emissions controls as set forth as NJAC 7:27-8.12.

"New Jersey Open Market Emissions Trading Program" - Allows the trading of credits for VOCs, oxides of nitrogen, and any greenhouse gas including carbon dioxide as a market-based approach to air quality regulation. Sources can comply with an emission limit by purchasing excess emissions reductions from another source. It is anticipated that renewable energy producers will generate credits, which may be salable to other entities, under this program.

"PJM Interconnection, L.L.C." ("PJM ISO") - Means the Independent System Operator that operates the power exchange in sections of Pennsylvania, New

Jersey, Maryland and Virginia, and all of Delaware and the District of Columbia.

"Societal Benefits Charge" – In accordance with the Act, each electric and gas public utility may recover costs for programs approved under the CRA through a societal benefits charge ("SBC"). The SBC is a nonbypassable distribution charge imposed on all electric and gas utility customers as appropriate N.J.S.A. 48:3-60(a)(3).

"Sustainably Grown and Harvested Biomass" means, for the limited purpose of this Solicitation, electric energy produced from biomass, either by the burning of captured methane gas derived from biomass or the direct firing of biomass derived from the following materials, and reuse of feedstock ash, and other residues, so as to prevent their disposal as solid waste:

a). Gas from the anaerobic digestion of food waste and sewage sludge.

b). Gas from the anaerobic digestion of other biomass fuels, including bioenergy crops and agricultural waste, provided documentation demonstrates that the biomass was cultivated and harvested in a sustainable manner; (e.g. it was grown in accordance with applicable state Department of Agriculture Farm Conservation Plan - approved by the local soil conservation district, state approved forest management plan, or a third party forestry or agricultural sustainability certification);

c). A bioenergy crop, provided that documentation is maintained that demonstrates that the crop was cultivated and harvested in a sustainable manner; (e.g. it was grown in accordance with applicable state Department of Agriculture Farm Conservation Plan - approved by the local soil conservation district, state approved forest management plan, or a third party forestry or agricultural sustainability certification);

d). Any of the following types of wood, provided that the wood is clean and untreated and that documentation is maintained that demonstrates that at least 75% of the wood can be verified to have been cultivated and harvested in a sustainable manner (e.g. it was grown in accordance with applicable state Department of Agriculture Farm Conservation Plan - approved by the local soil conservation district, state approved forest management plan, or a third party forestry or agricultural sustainability certification):

- wood produced at a biomass energy plantation;

- wood from the thinning or trimming of trees and/or from a forest floor, except wood from old growth forests;

- ground wood, produced through the grinding or shredding of pallets and other scrap wood (and the removal of nails and any other metal) at a recycling facility that is classified as a Class B recycling facility by the New Jersey Department of Environmental protection's Bureau of Landfill and Recycling Management or an equivalent recycling facility approved by the state environmental agency in which the facility is located; or

- wood shavings and scrap from the wood products industry, including, but not limited to a lumberyard, paper mill, or "secondary product manufacturer".

Final satisfactory demonstration of the sustainability of any of the feedstocks listed above will be demonstration by the bidder providing information that the bioenergy crop was sustainably grown and harvested as set forth in b through d above; and for all biomass that the ash, and similar residues, resulting from the combusion of the biomass feedstock to generate electricity, are reused, or incorporated into, useable endproduct, and not disposed of as solid waste and the combustion unit meets the definition as SOTA for emissions controls as set forth at NJAC 7:27-8.12.

"Tradable Credits" - Means a discrete emissions reduction credit based on reductions of a greenhouse gas. One greenhouse gas credit has an assigned value of one metric ton (2,205 pounds) of carbon equivalent.

**2.2. SCOPE OF WORK**

- No feasibility studies, or location research will be funded through this Solicitation.
- Projects encompassing multi-year completion schedules will be entertained, but rapid development and commissioning of projects is a primary aim.
- Teaming arrangements are encouraged when necessary to meet project goals. Teams may consist of commercial firms, government organizations, universities, or other organizations. Proposing teams should include members who have renewable energy plant development and operational experience.

Proposals for project funding must meet the following minimum requirements to be considered for funding:

- Total installed capacity and expected annual energy production required so the size of the REG project in relation to the amount of funding requested can be evaluated.
- A minimum of 90% of the total funding requested from the Board should be based on performance (ie. electricity production).
- A maximum of 10% of the total funding may be requested upfront for design, permitting and/or construction.
- There is no minimum level of cost sharing, however, higher levels are preferred and will be given additional weight in proposal evaluation.
- Proposers must demonstrate that they have financial resources to perform the proposed work, appropriate technical expertise, access to adequate facilities or the ability to get them, and a good performance record; and be qualified for an award under applicable laws and regulations.
- The project must be installed at one or more sites within New Jersey. This program does not preclude selling energy from the project to locations outside New Jersey.
- The project should not exceed 1 year for design, 1 year for permitting and 2-3 years for construction.

- Electricity from the project must be offered for sale in New Jersey, though sales to entities outside New Jersey are not precluded.

## 3.0 PROPOSAL SUBMITTAL

### 3.1 PROPOSAL INSTRUCTIONS

Bids must be submitted to the address and by the due date specified in the applicable Solicitation. Bids that are received by the Board by the due date will be logged in and time-stamped. Bids not received by the Board by the due date specified in the applicable Solicitation shall be rejected and returned to the submitting bidders unopened. In the interest of fairness to all bidders, no exceptions will be granted.

Every bid must include the required information. Bids that do not include the required information will be disqualified.

Further description of these information items is provided in the subsections below.

Prospective proposers may submit multiple proposals for different projects. The successful proposer(s) will be responsible for all aspects of the REG projects: development, installation, operation, financing, power sales, wheeling, plant ownership, and decommissioning.

Any bid may be amended prior to the bid due date by submitting a revised bid that fully complies with the Solicitation along with a letter identifying the bidder's initial bid and directing the Board to replace the initial bid with the subsequent revised bid. If received on time, the Board will evaluate the revised bid. Otherwise, the initial bid will be evaluated.

Bids will not be returned to bidders; they will be retained for project files.

Proposers must mail ten (10) copies of the complete proposal; faxed copies will not be accepted. Proposals must be submitted in the following format:

### 3.2 PROPOSAL PREPARATION

**3.2.1 ABSTRACT** – (*limit – 1 page*) Summarize the project. To the extent known, include proposed status of project development, operation date, location, size of project (kilowatts and acreage), type and size of technology, interconnection issues, and a general site description (wooded, rural, farm, recreational, park, etc.)

#### 3.2.2 PROJECT DESCRIPTION

Please provide the following information:

- Previous New Jersey Siting Work – Describe the work done to date in developing the proposed project

- Site Location and Description – Indicate the candidate area or areas for project development and the basis for site selection. If a specific site has been selected, include a map with the location of the site clearly marked. Describe the current uses and type of vegetation of the land under consideration. Specify whether the project is located at one site, or divided among several sites.

- Environmental Impacts and Benefits – For each candidate site, and the proposed Class I renewable energy technology, discuss known environmental impacts including but not limited to, avian, noise, aesthetics, endangered species, wetlands impact, storm water management. Indicate how each environmental issue if impacted, will be addressed. The discussion shall include compliance with NJDEP standards as appropriate. Guidance on environmental impact assessment are available by calling the NJDEP Office of Program Coordination's Document, "Environmental Assessment" at 609-292-2662. Also describe the environmental benefits of the Class I renewable energy technology including reduction in air emissions over the New Jersey and PJM average emissions and other environmental factors, include reduction in waste water discharges, water use, land use, and solid waste generated when compared to the New Jersey average grid generated electricity.

- Design – The overall design of the Class I Renewable Energy facility and system is encouraged to be consistent with the U.S. Green Building Council Rating System – Leadership in Energy and Environmental Design ("LEED") most recent version. At a minimum, the facility/system shall be designed, in so far as practicable, to achieve a silver level certification. When this is not practicable, please provide an explanation. Information on the U. S. Green Building Council's LEED program can be obtained at www.usgbc.org.

- Permits – For each candidate area, identify permits required to build and operate the project and the expected time to obtain permit approvals. Discuss plans for community outreach and how the local community will be involved in the permitting process. Information on all NJDEP permits is available from the Office of Pollution Prevention and Permit Coordination ("OPP/PC") through the One Stop program. At minimum, proposals must meet NJDEP Silver Track II standards. Information on the NJDEP Silver Track II Program can be obtained from the NJDEP website at www.state.nj.us/dep.

- Schedule – For each REG project, identify the expected duration of both the permitting, design and construction phases.

- Land Acquisition – For each candidate area, identify the nature of land ownership, and propose a plan to acquire land or leases. Indicate the type and number of entities owning the land.

- Electric Interconnection – For each candidate area, discuss issues associated with electrical interconnection, including the distance between the project and a suitable point to interconnect with the electrical grid. Identify new equipment to be installed and upgrades to existing equipment required.

- Identify your strategy for offering the electricity provided in the electric market.

- Data – For each candidate area, describe the renewable resource characteristics applicable to the technology and the site of the project. See: http://rredc.nrel.gov/.

  For Wind: an average monthly wind speed at turbine hub height, average wind shear, turbulence intensity, annual wind speed frequency distribution (0.5 m/s bins), seasonal variations and annual wind rose (shown graphically). Provide the period of

data collection. Where the data is estimated, provide the basis for estimate. Estimate outputs of electricity. See: http://rredc.nrel.gov/wind/.

For Photovoltaics: an average monthly insulation on the proposed plane of installation. Provide the azimuth angle at which the array will be installed, the tilt angle and the type of tracking whether fixed, one axis or two axis. State which measuring data site you have used for your estimate. Provide source if the data is from a source other than the National Renewable Energy Laboratories database. Estimate outputs of electricity. See: http://rredc.nrel.gov/solar/.

For Landfill or Biomass: the source of fuel, characterization of fuel source by percent of methane, amount and type of contaminants and type of cleanup that will be required to utilize gas, average monthly production of methane gas from the intended site, seasonal variation, combustion technology and estimated outputs in electricity, steam and emissions.

For Sustainably Grown and Harvested Biomass: source of biomass, documentation that biomass was cultivated and harvested in a sustainable manner, method of utilizing biomass to produce electricity, reuse of byproducts such as ash and residues, amount of residues and byproducts to be used or reused, amount of methane or other fuel recapture beyond that which is required by existing federal and state rules, type of equipment to be used to reduce emissions.

For Fuel Cells: source of fuel, average monthly supply of the fuel source, seasonal variation, makeup of the gas, contaminants, estimated outputs of electricity, water and emissions.

- Equipment – Indicate the type of equipment that will be installed. If not yet selected, indicate the candidate technologies and the characteristics you are looking for. Indicate whether you plan to own or lease equipment and whether equipment will be new or used. Describe the equipment candidate, the specifications, warranties and how long it has been commercial and approximately how many are currently in service. Include a description of the ability of the equipment to work in New Jersey's climate. Indicate the equipment's delivery time once an order has been placed.

- Plant Capacity and Energy Production – Indicate the expected nameplate capacity for the plant and the anticipated number of units for the selected technology or for each candidate technology. Indicate the potential total nameplate capacity that could be developed on the site if known. Based on a candidate technology, estimate the net yearly energy output for the plant, accounting for losses and availability and include any assumptions that are the basis for the estimate.

- The Estimated Generation Over Five Payment Years – Bidders must, to the best of their ability, accurately estimate the level of generation that their proposed project will be able to provide over the five years that incentive payments will be received. This estimate will be used to determine the point at which program funds are expected to be fully allocated and consideration of bids will stop. Estimation of the expected generation also has implications after program funds have been allocated. Underestimation of expected generation could lead to insufficient funds in the Grid Supply Account to make the payments. On the other hand, overestimation of expected generation will tie up funds unnecessarily, and is potentially anti-competitive.

Underestimation of generation will be discouraged by limiting incentive payments to no more than the amount of generation proposed in the bid for the project (over five years). That is, a project may end up generating more than originally estimated in their bid, but it will only receive incentive payments up to the amount reflected in the bid.

Overestimates of generation will be discouraged through a reasonableness check on generation estimates, by limiting incentive payments to five years of actual generation. Substantial overestimates may result in a forfeiture of incentive payments.

- Bidder Information and Signatures – The bid should include the full business address of the bidder, and the names and phone numbers of authoritative and technical contact persons. A principal of the firm must sign the attached statement of Verification of Bid Information (Appendix A) and of the bidder's intent to bid and to abide by the protocols of bidding and the structure of incentive payments as described. The name and title (if any) of the person that signs the bid shall be typed or printed below their signature and the signature shall be witnessed. Satisfactory evidence of authority of each person signing the bid shall be furnished upon request.

### 3.3 POST-AWARD CHANGES IN PROPOSED PROJECT

Projects are expected to go from award to completion unaltered from their original proposal; that is, projects are expected to be designed and proposed as feasible, serious projects that can be permitted. The Board, however, recognizes that some project changes may be required due to permitting requirements or events that are unforeseen by the bidder. The Board must be notified in advance in writing of any proposed change in a winning project while the incentive program is pending or operational for that project. Changes that have no material bearing upon the purposes or process of the incentive program, or on the amounts of incentives received by the project, will receive a letter of notification that the proposed change will not affect the project's award.

Changes having a material bearing upon the purposes or process of the incentive program may, upon determination by the Board, result in forfeiture of incentive payments, or termination of grant award to the project. For example, a project that is or becomes non-renewable will materially affect the program.

The Board will determine an appropriate response, ranging from notification that the proposed change will not affect the project's award, to an order terminating or reducing the project's award.

**3.4 ECONOMICS** – Describe plans for selling or using energy from the plant.

- The Cents/kWh Incentive Payment Requested – These production incentives will be a constant, nominal cents/kWh amount paid monthly over at most a five year period for eligible generation, beginning with the first eligible month of generation from the project or the authorization of award to the project, whichever is later.

- Bidder may request upfront incentives to facilitate project design, permitting and/or construction up to 10% of total incentive funding. Documentation of need for such incentives should be included.

- Indicate your plans for marketing energy from the plant and the status of negotiations with potential purchasers or users of the energy. Include your consideration of marketing energy from the plant to fulfill the Board's RPS requirements as part of this.

- For information on New Jersey's Independent System Operator, visit the PJM website at www.pjm.com.

- Provide a rudimentary cash flow analysis over the lifetime of the project. Indicate sources of financing for the project.

- Indicate plans for operation following the end of the incentive period.

- Discuss the proposed treatment of all "secondary environmental attributes" associated with the renewable generation, such as $SO_2$, $NO_x$, $CO_2$ emission credit allowances. Proposals that would credibly retire these credits, or bundle them along with the sale of electrons to purchasers of electricity, may be preferred to proposals that sell these credits separately from the renewable energy.

### 3.5 PROPOSING TEAM

- Organizational Chart – Prepare an organizational chart listing all team members, including the project manager and any subcontractors and other sponsors involved in the project, showing their roles and responsibilities.

- Qualifications – State the proposing team's individual and combined expertise that would enable successful completion of this project. Describe sources of financial resources that will be used by the proposer to perform the proposed work. Submit resumes of all key project team members, including those of proposed subcontractors. Include education and experience that are relevant to the proposed work.

- Previous REG Development Experience – Describe the proposing team's experience in developing and operating renewable energy plants, marketing power, and other relevant areas. List related projects that have been undertaken and successfully completed by the proposer and/or subcontractors. For each project, provide a brief project summary and the name and phone number of a client contact. The Board reserves the right to contact anyone so listed.

**3.6 DECOMMISSIONING PLAN** – While the Board prefers that the plant continue to operate beyond the project term, the issue of decommissioning must be addressed in the proposal, to ensure that the future of renewable grid supply in New Jersey is not marred by inoperable, abandoned plants. Describe your plans for decommissioning the plant at the end of its life. Identify what you will do to ensure the site is restored and the plant is not abandoned or left inoperable for an extended period of time. A surety bond or equivalent is preferred.

**3.7 STATEMENT OF WORK** – The Statement of Work is the primary contractual document that outlines work activities and required performance for payment. It specifically delineates each step or procedure required to accomplish the project objectives. Therefore, each action shall be identified, indicating who will perform it, how it will be performed and its intended result. Be clear and specific; concentrate on "how" and not "why". Use the following guidelines as the basis for your Statement of Work and modify it as necessary to fit your project and provide

additional information. Clearly identify what has been done and present the results here in and what still needs to be done and how it will be done.

The Statement of Work must be structured as an ordered set of tasks and attachments as follows:

Introduction Briefly and clearly state the overall technical goals of the project.

Task 1: Project Management

Subcontractor Coordination – State how activities will be coordinated between the proposer and any partners, any subcontractors, and the Board. A discussion of subcontracting arrangements should also be included.

Project Management Meetings – Plan a kickoff meeting, an acceptance meeting, and a wrap-up meeting. Identify parties to participate at each meeting. Identify parties responsible for scheduling the meeting, providing the agenda (in advance), and issuing minutes.

Task 2: Reporting

The Contractor shall submit reports by the 15$^{th}$ of the month following the reporting period. Quarterly reports shall summarize progress, difficulties, and planned solutions associated with developing and installing the plant. After construction, monthly reports shall summarize the power plant's performance and identify all operational problems and actions taken to fix the problem. A final report may be requested at the end of the incentive period.

### 3.8 RATES, CHARGES AND BILLNG

All projects are expected to come on-line by the date specified in the proposal. Any project failing to come on-line by this date may have its award reduced or terminated by the Board.

To receive production credit payments, on-line projects must submit monthly invoices identifying the amount of eligible power generated from the project with a written statement of an independent third party verifying the project's eligible power generation for the billing month.

### 3.9 FAILURE TO SUPPLY

If a project consistently generates less than estimated in its bid or current project award package, the project will run the risk of an overestimation penalty. The Board will determine, based upon the generation information submitted, whether a project may be at risk for a penalty for overestimation, and notify the project. Projects that are generating less than expected may request a change in their project award package. Such a request should describe the circumstances of the lower than expected generation, and explain clearly why the shortfall in generation was not accounted for in the original bid for the project and in subsequent milestones during project construction.

The Board may determine that some generation from a project is ineligible (for example, has been used on-site or has not been produced in conformance with the definition of renewable generation) and penalize the project by reducing subsequent production incentives appropriately. The Board will notify a project if a portion of its generation is of questionable

eligibility. In an effort to avoid any penalty, the project may appeal or clarify with additional information.

## 4.0 PROPOSAL EVALUATION AND CONTRACT AWARD

### 4.1 PROPOSAL EVALUATION COMMITTEE

The Board is establishing an advisory committee to assist it and the NJDEP in review of proposals and review of construction and performance of project(s) receiving funding. This non-affiliated group of experts in the field of renewable energy generation projects will assist in the review of proposals and make its recommendations to Board Staff, in consultation with the NJDEP. The Board will have final authority in awarding funds.

### 4.2 EVALUATION CRITERIA

The following evaluation criteria, not necessarily listed in order of significance, will be used to evaluate proposals. These evaluation criteria categories may be used to develop more detailed evaluation criteria to be used during the evaluation process.

**4.2.1** The bidder's general approach and plans to meet the requirements of the Solicitation.

**4.2.2** The bidder's detailed approach and plans to perform the services required by the scope of work of this Solicitation.

**4.2.3** The bidder's documented experience in successfully completing contracts of a similar size and scope to those required by this Solicitation.

**4.2.4** The qualifications and experience of personnel assigned by the bidder to the contract with emphasis on documented experience in successfully completing required services of a similar size and scope to those required by this Solicitation.

**4.2.5** The overall ability of the bidder, as judged by the State, to gear-up, undertake and successfully complete the contract within the required schedule or on time.

**4.2.6** The cost of the project, taking into account both the bidder's Cost Proposal and the environmental impacts of the project (described by Appendix C) associated with the proposed technology. This environmental cost will be evaluated in accordance with Section 4.3 below. The State reserves the right to reject any bid if the emissions of $NO_x$, $SO_2$, or $CO_2$ associated with the electricity product being offered exceeds the New Jersey electric generation average emissions (EGRID 1999 average data).

**4.2.7** The amount of funding requested as a percentage of the total project cost.

**4.2.8** The output/capacity of the project, in MWhs and MWs.

**4.2.9** The proposed location of the REG projects, siting and permitting.

**4.2.10** Consideration of the goals with the State Development and Redevelopment Plan regarding land uses prescribed areas.

**4.2.11** The mix of technologies.

**4.2.12** The environmental attributes of the proposed technology (defined in Section 4.3 below).

**4.2.13** The timeframe for construction/startup of the project.

**4.2.14** Feasibility.

**4.2.15** Incentives requested for the project.

**4.2.16** Verified performance of the technology.

**4.2.17** Concurrence with the NJ Sustainability Greenhouse Gas Action Plan.

**4.2.18** Provisions for trading/retiring of emissions credits.

### 4.3 BID EVALUATION ENVIRONMENT IMPACT ADJUSTMENT

The electricity product offered by a bidder has associated environmental costs to varying degrees. In some cases, the specific environmental externalized costs may be zero. These environmental attributes include air emissions, water use, land use, wastewater generation and solid waste generation. The air emissions, water use, wastewater generation, land use and solid waste generation must be calculated by the bidder and provided to the Board as a component of the bid. These environmental impacts will be used to calculate environmental externality costs and will be considered, along with the proposal price, in determining which proposals receive funding. For this reason, use Appendix C to provide the information with each bid.

## 5.0 ATTACHMENTS

Appendix A Verification and Bid Information
Appendix B Certifications
Appendix C Environmental Adjustment

## APPENDIX A - - VERIFICATION OF BID INFORMATION

1. "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I understand that, in addition to criminal penalties, I may be liable for a civil administrative penalties and that submitting false information may be grounds for denial, revocation or termination of any electric power supplier's license for which I may be seeking approval or now hold."

2. The certification in 1 above shall be signed by the applicant as follows:

    i. For a corporation, by a principal executive officer of at least the level of vice president;

    ii. For a partnership of sole proprietorship, by a general or the proprietor, respectively; or

    iii. For a municipality, county, State, Federal or other public agency, by either a principal executive officer or ranking elected official.

    _____
    (Signature and Title)

    _____
    (Name, please print)

    _____
    (Date)

**APPENDIX B - - CERTIFICATIONS**

I. Certification Regarding Debarment, Suspension or Ineligibility for Award

The bidder certifies, to the best of its knowledge and belief, that:

(1) The bidder and/or any of its principals ___ are, ___ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal or State agency, and

(2) The bidder and/or any of its principals ____ have, ___ have not, within a three-year period proceeding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a Federal, state, or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and ___ are, ___ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with commission of any of those offenses.

II. Clean Air and Water Certification

The bidder certifies that:

(1) Any facility to be used in the performance of this proposed project is ___ is not ___ listed on the Environmental Protection Agency ("EPA") List of Violating Facilities;

(2) The bidder will immediately notify the State, before award, of the receipt of any communication from the State, indicating that the bidder proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and;

(3) The bidder will include a certification substantially the same as the certification, including this paragraph, in every nonexempt subcontract.

_____
(Signature and Title)

_____
(Name, please print)

_____
(Date)

## APPENDIX C - - ENVIRONMENT ADJUSTMENT

List the $NO_x$ emissions of the technology, per MWh. _____

List the sulfur dioxide ($SO_2$) emissions of the technology, per MWh. _____

List the carbon dioxide ($CO_2$) emissions of the technology, per MWh. _____

List the land usage, in acreage, of the proposal. _____

List the water usage of the proposal, in gallons per MWh. _____

List the wastewater disposal related to the proposal, in gallons per MWh. _____

List the solid waste generated, related to the proposal, in tons per MWh. _____